



# Installing the Cisco Global Site Selector 4490

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This chapter explains how to install a Cisco Global Site Selector 4490 in an equipment rack. It also provides general instructions for installing a GSS 4490 on a table or workbench.

This chapter contains the following major sections:

- [Unpacking and Inspecting the Global Site Selector 4490](#)
- [Tools and Parts Required](#)
- [Installing Your Unit](#)
- [Connecting Cables](#)
- [Connecting Power](#)
- [Booting the System](#)
- [Checking the Front Panel LEDs](#)
- [Removing or Replacing a Cisco Global Site Selector 4490](#)

Before you begin the installation be sure to read:

- [Chapter 2, Preparing for Installation](#)
- [Appendix C, Regulatory Compliance and EMI Class A Warnings](#)
- *Regulatory Compliance and Safety Information for the Cisco Global Site Selector 4490*

**Warning**

Read the installation instructions before connecting the system to the power source.

## Unpacking and Inspecting the Global Site Selector 4490

The Global Site Selector 4490 shipment contains the following items:

- Global Site Selector 4490
- One RJ-45 to female 25-pin sub-d connector
- Two RJ-45 to female 9-pin sub-d connectors
- One RJ-45 console cable
- One four-post rack mount kit
- One two-post rack mount kit
- Four rubber feet
- Cisco Product Documentation CD-ROM and Warranty Package
- *Cisco Global Site Selector Hardware Installation Guide*
- *Regulatory Compliance and Safety Information for the Cisco Global Site Selector 4490*

The Global Site Selector 4490 is shipped in a protective shipping carton. The GSS 4490 is shipped as a self-contained chassis; no components can be added or removed.

To unpack the GSS 4490, follow these steps:

1. Remove the GSS 4490 accessories from the shipping carton. Save the packing materials in case you need to repack the GSS later.
2. Check the configuration of the GSS 4490 and the accessories against the items listed on the packing slip. Report any discrepancies as described in [“If the Product is Damaged”](#).
3. Before installing the GSS 4490, review the information outlined in [Chapter 2, Preparing for Installation](#).

## If the Product is Damaged

If any portion of the unit or component is damaged in transit, forward an immediate request to the delivering carrier to perform an inspection of the product and to prepare a damage report. Save the container and all packing materials until the contents are verified.

Concurrently, report the nature and extent of the damage to Customer Service. Report the problem or deficiency to Customer Service along with the model number and serial number. Upon receipt of this information, you will be provided with service instructions, or a Return Material Authorization (RMA) number and shipping information. To obtain assistance, refer to the “[Preface](#)”.

## Tools and Parts Required

Your Global Site Selector 4490 comes with the following rack kits suitable for mounting the GSS 4490 in a 19-inch (48.26-cm) equipment rack:

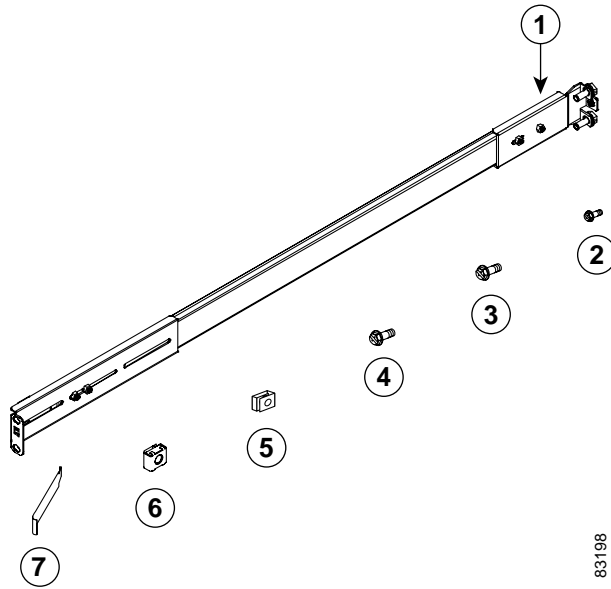
- A sliding rail four-post rack-mount kit
- A two-post rack-mount kit

To install the Global Site Selector 4490 in a rack you need the following parts and tools:

- Flat-blade screwdriver
- Phillips screwdriver
- One rack-mount kit

[Figure 3-1](#) identifies the items included with the four-post rack. If any items are missing or damaged, contact your place of purchase.

Figure 3-1 Four-Post Rack Installation Kit



1	Slide rail assemblies (2)	2	M3.5 screws with lock washers (3)
3	M4 screws (6)	4	M6 screws (10)
5	Clip nuts (10)	6	Cage nuts (10)
7	Cage nut insertion tool (1)		



**Note** The right and left slide rails are identical.

# Installing Your Unit

Place the unit in the desired location. You can mount it in a rack for your convenience, or place it on a solid, stable surface. If you do not plan to install the GSS 4490 in an equipment rack, proceed to the [“Installing the Chassis on a Workbench or Tabletop”](#) section.

Racks are marked in vertical increments of 1.75 inches (4.44 cm). Each increment is referred to as a rack unit (RU). A 1-RU device is 1.75 inches (4.44 cm) tall.



## Warning

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To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- This unit should be mounted at the bottom of the rack if it is the only unit in the rack.
- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.

If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.

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This section contains the following procedures:

- [Installing the Chassis in a Four-Post Rack](#)
- [Installing the Chassis in a Two-Post Rack](#)
- [Installing the Chassis on a Workbench or Tabletop](#)

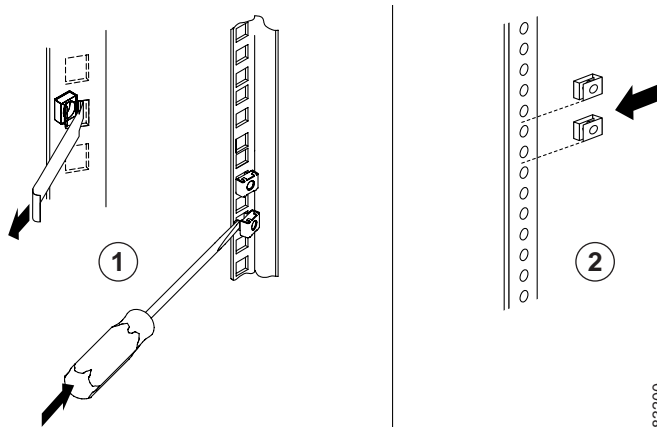
## Installing the Chassis in a Four-Post Rack

To install the Global Site Selector 4490 in a four-post rack, follow these steps:

1. Select a 1-RU-size location in the rack to mount the GSS 4490. If the rack holes are not threaded, install a clip nut or cage nut in the top and bottom positions of the selected 1-RU location (Figure 3-2), starting with the right front side of the rack (as viewed from the front of the GSS 4490). Install a clip nut or cage nut in the corresponding positions on the rear of the rack.

Repeat this step for the left front side of the rack and the corresponding location on the rear of the rack.

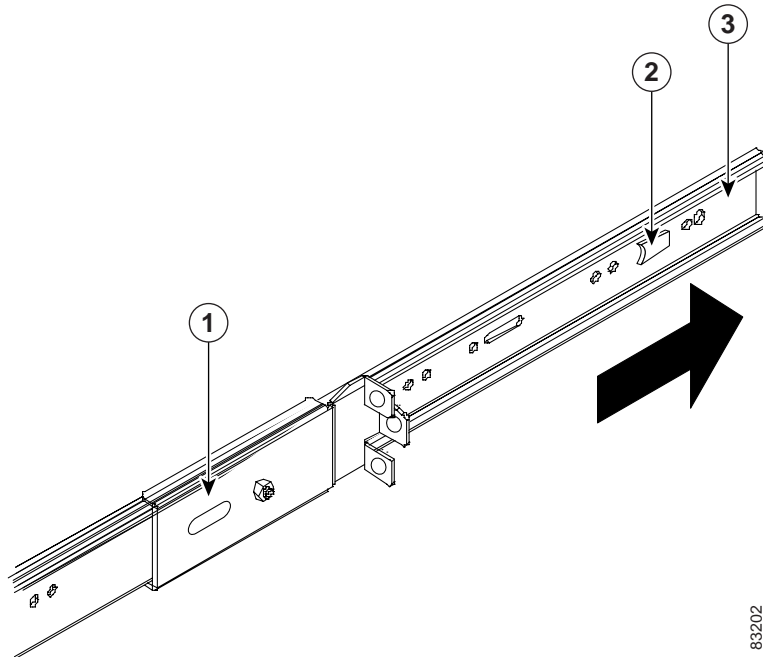
**Figure 3-2** Installing Clip Nuts or Cage Nuts in a Non-Threaded Rack



1	Cage nuts	2	Clip nuts
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- Remove the inner slide rails from the slide rail assemblies by pressing the release latches on the sides of the slide rail assemblies (Figure 3-3).

**Figure 3-3** Removing the Inner Slide Rail



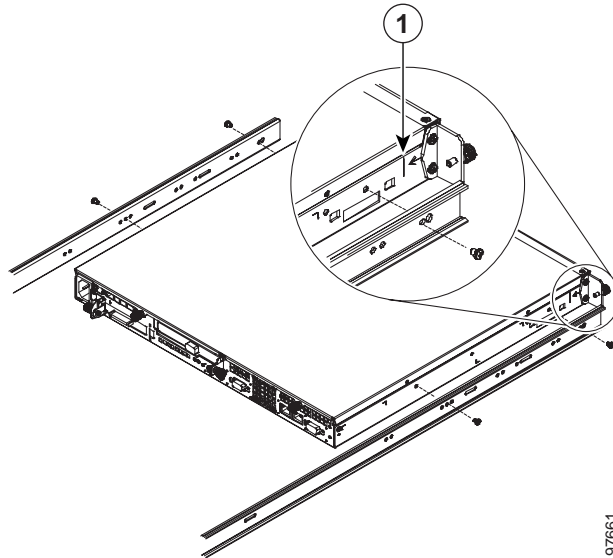
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1	Slide rail assembly	2	Release latch
3	Inner slide rail		

- Place an inner slide rail at the alignment marker (labeled 1 in Figure 3-4) as indicated by the arrow on the side of the GSS 4490. Use two M4 screws to secure the inner slide rail to the GSS 4490.

Repeat this step to attach the other inner slide rail to the GSS 4490.

**Figure 3-4 Attaching the Inner Slide Rail to the GSS 4490**



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4. Insert the tab on the front of the slide rail assembly through the center hole between the two clip nuts or cage nuts on the front flange.
5. Align the slide rail assembly to the front flange on the rack.  
Repeat step 4 and this step to install the other slide rail assembly.

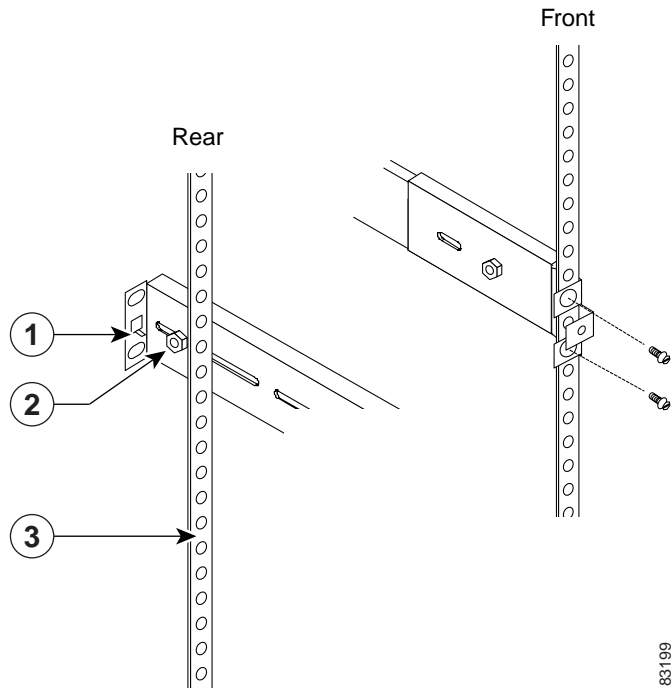


**Note** If it is necessary to adjust the length of the slide rail, loosen the adjustment screw on the rear of the slide rail; then adjust the length of the slide rail and tighten the adjustment screw (Figure 3-5).

6. Insert and tighten two M6 screws to secure the slide rail to the front flange (Figure 3-5).



Figure 3-5 Attaching the Slide Rails to the Rack



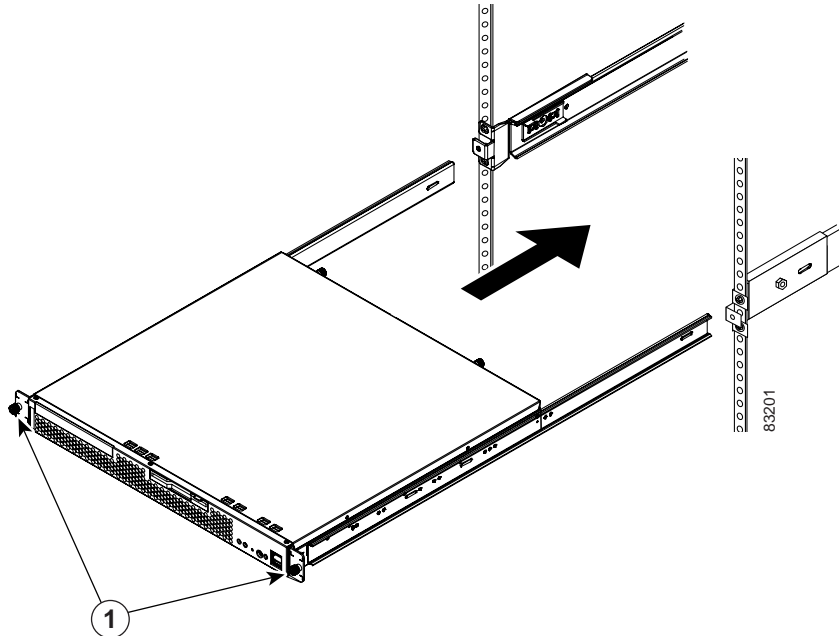
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1	Tab	2	Adjustment screw
3	Rear flange		

7. Insert and tighten two M6 screws to secure the other slide rail assembly to the rear flange.
8. Align and insert the inner slide rails into the slide rail assemblies until they lock into place.
9. Slide the GSS 4490 into the rack until it locks into place.

10. Tighten the captive screw (labeled 1 in [Figure 3-6](#)) on each side of the front of the GSS 4490 to secure it to the rack.

**Figure 3-6** Inserting the Inner Slide Rails



1	Release tab		
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11. Attach the power cord and the Ethernet cables to the GSS 4490.

Because the GSS 4490 does not contain cable retention brackets or cable strain relief brackets, you must first bundle the external cables before you route them. Use the remaining two cable straps to bundle the cables.



**Note** Leave sufficient slack in the cables to allow for sliding the GSS 4490 in or out of the rack.

To remove the GSS 4490 from the rack, reverse these instructions.

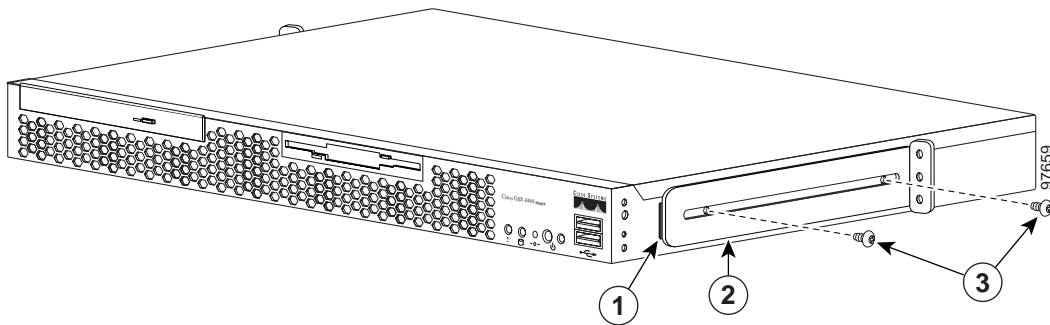
## Installing the Chassis in a Two-Post Rack

To install the Global Site Selector 4490 in a two-post rack, follow these steps:

1. Place one of the brackets at the alignment marker (labeled 1 in [Figure 3-7](#)) as indicated by the arrow on the side of the GSS 4490. Use two M4 x 8 screws to secure the bracket to the GSS 4490.

Repeat this step to attach the other bracket to the GSS 4490.

**Figure 3-7 Attaching a Bracket to the Right Side of the GSS 4490**



1	Alignment marker	2	Bracket
3	M4 x 8 screws		

2. Select a location in the rack to mount the GSS 4490, then position the GSS 4490 and brackets in the rack.

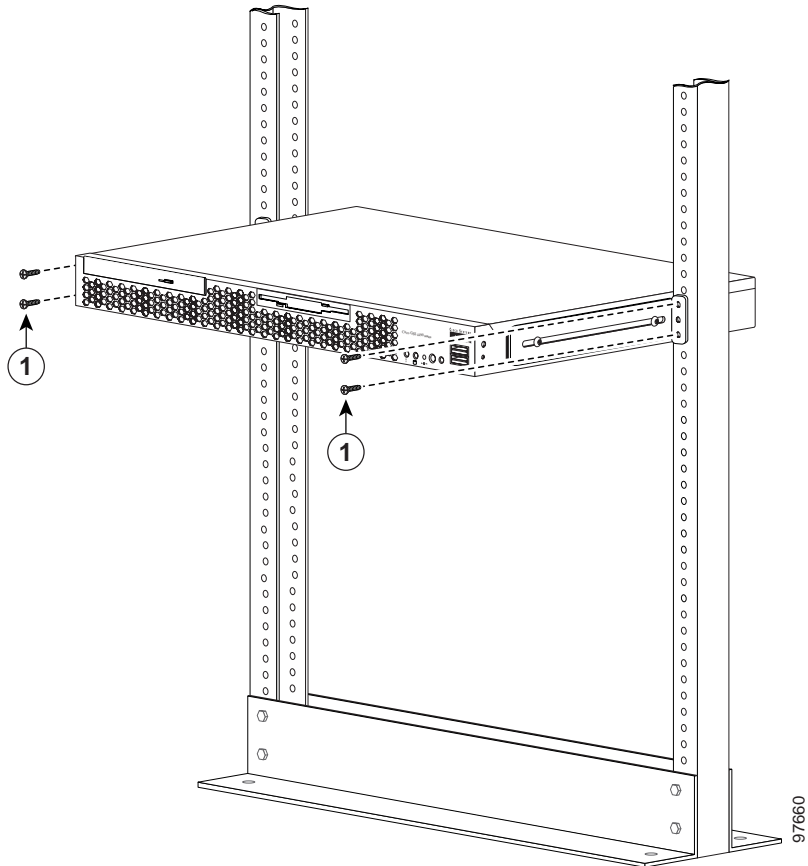
- Align the right side bracket on the GSS 4490 to the two-post rack, then insert and tighten the retaining screws (labeled 1 in [Figure 3-8](#)) to secure the GSS 4490 to the rack.

**Note**

Due to variations in rack size and rack holes, Cisco Systems does not provide the two-post rack mounting screws in the rack kit.

Repeat this step to secure the left side bracket to the rack.

**Figure 3-8 Attaching the GSS 4490 to the Two-Post Rack**



## Installing the Chassis on a Workbench or Tabletop

When you install a Global Site Selector 4490 on a workbench or tabletop, ensure that the surface is clean and in a safe location and that you have considered the following:

- The chassis should be installed off the floor. (Dust that accumulates on the floor is drawn into the interior of the chassis by the cooling fans. Excessive dust inside the GSS 4490 can cause overtemperature conditions and component failures.)
- There must be approximately 19 inches (48.26 cm) of clearance at the front and rear of the chassis for accessing network cables or equipment.
- The GSS 4490 must receive adequate ventilation (it is not being installed in an enclosed cabinet where ventilation is inadequate).

Follow these steps to install the GSS 4490 on a workbench or tabletop:

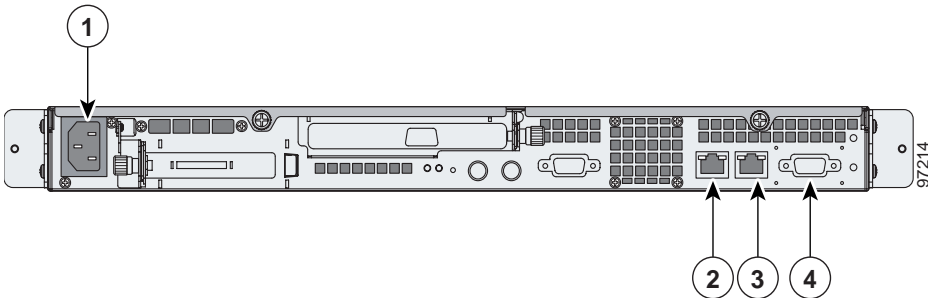
1. Remove any debris and dust from the tabletop or workbench, as well as from the surrounding area. Also make sure that your path between the GSS 4490 and its new location is unobstructed.
2. Attach the rubber feet to the bottom of the chassis. The rubber feet have an adhesive backing. Peel the protective tape off the adhesive and stick the feet to the bottom of a clean chassis surface. Place one foot in each corner.
3. Place the chassis on the tabletop or workbench.
4. Ensure that no exhaust air from other equipment will be drawn into the chassis. Also, ensure that there is adequate clearance at the front and rear of the chassis.

# Connecting Cables

To connect network and console cables to your GSS 4490, follow these steps.

1. For network connections, insert a Category 5 UTP cable into the Ethernet 0 or Ethernet 1 receptacle on the GSS 4490 back panel (Figure 3-9).
2. Connect the other end of the network cable to a hub or switch in your network.
3. For console connections, plug the cable into the console port on the GSS 4490 back panel.
4. Connect the other end of the console cable to a console or a communications server.

**Figure 3-9** Global Site Selector 4490 Back Panel Ports and Receptacles



1	AC power receptacle	2	Ethernet 0 receptacle
3	Ethernet 1 receptacle	4	Console port

# Connecting Power

To connect power to your AC system, follow these steps:

1. Review the safety information outlined in [Chapter 2, Preparing for Installation](#).
2. Plug the AC power cord into the power cord receptacle at the rear of the GSS 4490 (see [Figure 3-9](#).)
3. Connect the other end of the power cord to a power source at your installation site.
4. Power up all externally connected devices.
5. Press the power control button on the front of the GSS 4490.

# Booting the System

When you power up a Cisco Global Site Selector, the boot process:

- Performs hardware initialization and power-on self tests
- Initializes the BIOS
- Initializes the Linux boot manager, LILO (Linux Loader)
- Boots the GSS image (kernel and software)
- Displays the startup banner and splash screen for strong encryption
- Prompts you to log in to the GSS



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**Note**

While the GSS 4490 is powering up, the green power LED on the front of the GSS 4490 is on.

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At this point you are ready to use the GSS device. Refer to the *Cisco Global Site Selector Configuration Guide* and the *Cisco Global Site Selector Command Reference* for details on setting up, configuring, and using the GSS device.

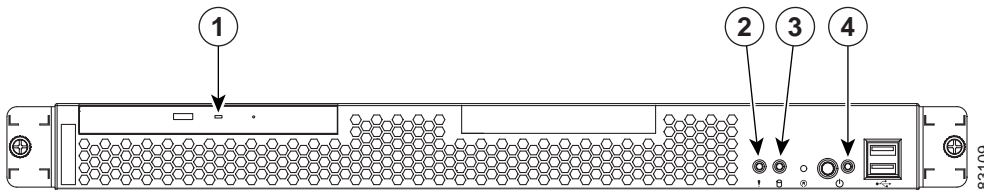
## Checking the Front Panel LEDs

If you are booting the GSS 4490 for the first time and the system boots without a startup-configuration file, a setup script automatically runs to quickly guide you through the process of initially configuring the GSS. Refer to the *Global Site Selector Configuration Guide*, Chapter 2, Setting Up Your GSS and GSSM, for details.

# Checking the Front Panel LEDs

When the Global Site Selector 4490 is up and running, observe the front panel LEDs. [Figure 3-10](#) shows the location of front panel LEDs, and [Table 3-1](#) describes their function.

**Figure 3-10** Front Panel LEDs



1	CD-ROM drive activity	2	System error
3	Hard disk drive activity	4	Power

**Table 3-1** Front Panel LEDs

LED	Color	State	Description
CD-ROM drive activity	Green	On	Indicates that the CD-ROM drive is in use.
System error	Amber	On	Indicates that a system error has occurred. An LED on the diagnostic LED panel will also be on to further isolate the error.
Hard disk drive activity	Green	Flashing	Indicates that the associated hard disk drive is in use.



Table 3-1 Front Panel LEDs (continued)

LED	Color	State	Description
Power	Green	On	Indicates that the GSS 4490 has power.
		Flashing	Indicates that the GSS 4490 is in standby mode.

## Removing or Replacing a Cisco Global Site Selector 4490



Warning

Before working on a system that has an On/Off switch, turn OFF the power and unplug the power cord.



Warning

Ultimate disposal of this product should be handled according to all national laws and regulations.

Before removing or replacing a GSS 4490, you should logically remove the GSS from the network before physically removing it.

To logically remove a GSS 4490 from the network, follow these steps:

1. Log on to the CLI (see the *Cisco Global Site Selector Configuration Guide*).
2. At the CLI prompt, enable privileged EXEC mode and then global configuration mode on the device. For example:

```
localhost.localdomain> enable
```

3. Use the **gss stop** command to stop the GSS software running on the GSS 4490. For example:

```
localhost.localdomain# gss stop
```

4. Use the **gss disable** command to disable the selected GSS 4490 and remove any existing configuration, including deleting the GSSM database from the GSS device. This option returns the GSS 4490 to the initial, unenabled state. For example:

```
localhost.localdomain# gss disable
localhost.localdomain# shutdown
```

5. If you are logically removing a GSS or a standby GSSM from the network, access the primary GSSM graphical user interface and click the **Resources** tab.




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**Note** To logically remove the primary GSSM from the network, you must enable the standby GSSM in the role of the primary GSSM using the **gss enable gssm-primary** CLI command. You may then access the newly assigned primary GSSM and logically remove the GSSM from the network. Refer to the *Cisco Global Site Selector Configuration Guide* for details.

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6. Click the **Global Site Selectors** navigation link. The Global Site Selectors list page appears.
7. From the Global Site Selectors list, click the **Modify GSS** icon located to the left of the GSS device you want to delete. The Modifying GSS details page appears.
8. Click the **Delete** icon in the upper right corner of the page. The GSS software prompts you to confirm your decision to delete the GSS device.
9. Click **OK** to confirm your decision. You return to the Global Site Selectors list page with the deleted device removed from the list.

To physically remove a GSS 4490 from your network, follow these steps:

1. Power down the GSS 4490.
2. Disconnect the power cords and network cables.
3. Physically remove the chassis from the rack.

To physically replace a GSS 4490, follow these steps:

1. Remove the GSS 4490 from the network (as described above).
2. Install the new GSS 4490 and configure it using the same configuration parameters (such as IP address) that you used for the removed GSS 4490. Refer to the *Cisco Global Site Selector Configuration Guide*, Chapter 2, Setting Up Your GSS for details.

